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MN020601. Navy Surgeon General Lauds Military Medicine
By Jan Davis, Bureau of Medicine and Surgery

WASHINGTON, DC - Navy Surgeon General VADM Michael L. Cowan, MC, said Navy Medicine "got a pop quiz on how we were doing" on Sept. 11, and he was proud to say it and all of military medicine passed with flying colors.

"I've just reached the 30 year mark (in the Navy), and I have to say I have never been more proud than I am now," said Cowan about Navy and military medicine's response to the terrorist attacks.

Cowan, yesterday's plenary speaker at the annual all-service TRICARE Conference in Washington, DC, recounted how Navy healthcare professionals "knew where their battle stations were" in the wake of the attacks at the Pentagon and New York, and responded with speed and professionalism to whatever came their way. This continues today, he said, as Navy Medicine established Fleet Hospital 20 in Guantanamo Bay, Cuba, providing ethical and humane treatment to detainees.

Echoing Chief of Naval Operations ADM Vern Clark's remarks made earlier in the week, Cowan talked about the impressive shift military medicine has made in the past half decade, going from one of Sailor's biggest complaints to one of the services' greatest perks.

"Sailors say good health care for their families is the number one quality of life reason for staying Navy," said Cowan. "It's number two or three for themselves. It's not even listed in the top ten as a reason why Sailors get out."

Cowan said he has seen a shift in focus of military medicine toward force health protection, ensuring that military medicine fields hyper healthy, hyper fit troops that can sustain the mission, complete the mission and go home healthy.

He said that there were four things that Navy and military medicine should do to ensure force health protection: Field a healthy fit force, deploy medical forces with them to protect them and aid them should they be injured, provide quality health care for their families back home, and be the instrument of a grateful nation to thank our retired forces for their service by providing them quality healthcare.

What lies in the future, Cowan said, was really anyone's guess and it is virtually impossible to be completely ready for what can't be known. But

there is a "transitional place" between the present and the future, a "futsent" or "presture" where military medicine could focus to be most ready for the challenges ahead.

As he closed his remarks, Cowan also praised the new TRICARE Online website portals for patients to communicate with their healthcare providers. He called on military medicine leaders to use technology such as TRICARE Online to advance the quality of military healthcare.

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MN020602. CNO Calls TRICARE Improvements "Remarkable"

By JOC Walter T. Ham IV, Office of the Chief of Naval Operations

WASHINGTON, DC - Chief of Naval Operations ADM Vern Clark said the improvements in TRICARE over the last half-decade have been "truly remarkable."

"By delivering quality medical care to our people, you are seeing to it that this institution keeps its promise," Clark said during an address Feb. 4 to the 2002 National TRICARE Conference. "I want you to know how much I appreciate what you're doing."

According to the CNO, while the TRICARE system continues to improve, military healthcare faces a "corporate self-talk" issue that keeps information on improvements from making it down to the deckplates.

"If we are going to be the employer of choice, if we are going to be an institution that is known as one that keeps its promise, we've got to make sure that we get the word out," the CNO said. "And we've got to make sure that we continue to make this thing as effective and efficient as we can."

The CNO emphasized that good resource management in the medical industry, and throughout the service, is crucial to recapitalizing the Navy to fight future wars.

"Our institution spends \$24 billion a year on medical services," Clark said. "The challenge is to extract every ounce of utility from what the taxpayers of the United States have presented to us."

The CNO stressed that quality medical care is a key component of "the promise" of covenant leadership.

"Leaders must promise to give people a fair wage. They must promise to provide good housing conditions. They must promise proper working conditions and tools. These are the things that people need to make a difference," the CNO said. "At the top of nearly every list you put together is the promise of medical care for Sailors and their families. It's fundamental to the promises that we make to our young men and women when they raise their right hand."

The CNO concluded that the war on terrorism adds an even greater importance to the need for quality medical care.

"We don't know what this enemy will throw our way next. We do know that we are fighting an enemy who will do anything to destroy our way of life," the CNO said. "Our challenges, especially those facing the medical care industry, are immense. Thank you for what you're doing for the men and women of the United States military. Thank you for committing yourself to this calling to deliver on the promise. We can't be more grateful than we are for what you're doing."

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MN020603. Researchers Use Saliva to Test for TB, Anthrax Antibodies

GREAT LAKES, Ill. - Researchers at Naval Dental Research Institute Great Lakes, Ill. are using saliva to help protect Sailors and Marines against two potentially deadly diseases.

Two different saliva tests are being developed: One to see if individuals have been exposed to tuberculosis (TB), and one to check anthrax

antibody levels after receiving the anthrax vaccine series of inoculations.

According to CDR Linda Lininger, MSC, the principal investigator developing the tests, the TB test is an especially valuable tool to keep Sailors and Marines healthy.

"Marines and Sailors can be deployed to countries where TB is a problem, so it would be prudent for them to be screened for infection," said Lininger. "The faster we can determine someone has been exposed to TB, the more aggressively we can treat and stop the spread of disease."

Tuberculosis is an ancient serious respiratory disease that has been on the upswing in the last several years.

The current tuberculosis test requires a tiny amount of reactant be injected into the skin of the forearm. The injection site must be checked by a health care provider about 72 hours later to see if a telltale red circle, indicating the presence of TB antibodies and exposure to TB. NDRI's screening test requires only a little saliva and the results are available in 10 minutes. Non-health care professionals can easily be trained to administer the test.

The anthrax test works similarly, but monitors the presence of antibodies after receiving the anthrax vaccine. A high level of antibodies indicates that the vaccine has been successful in developing protection against anthrax. Results are also available within 10 minutes and can be done on site.

Lininger said an advantage of monitoring anthrax antibodies levels in an individual with the simple, inexpensive saliva test is that if it shows levels high enough, the whole series of six shots may not be necessary. Conversely, if, after six shots the levels aren't high enough to protect against the disease, additional shots may be needed.

Two technologies are used in the test. The first, the lateral flow, is similar to an over-the-counter pregnancy test. The prototype being tested at NDRI is about the size of a stick of gum and rugged enough to be carried in a uniform pocket. It's used for screening to see if antibodies are even present.

The second technology, fluorescence polarization, is much more sensitive and not only shows whether antibodies are present, but at what levels. For example, it can test the difference between latent and active TB. This technology is housed in a hand-held monitor rugged enough to use in any forward-deployed environment. It, too, can provide test results in minutes.

NDRI has a patent pending on the spit tests, and is working with volunteers now to ensure the reliability of the tests. If all goes well, it may be ready for use in the Fleet by next year.

Lininger said that the anthrax and TB tests are just the first step in what could be a method to check for exposure to a number of diseases - quickly, easily, economically, and without the needle stick of a blood test.

"Sailors and Marines go to the dentist annually for check ups, so ideally while they are waiting for their appointments, they could spit in a cup and a whole battery of tests could be run," said Capt. James Ragain Jr., Dental Corps, NDRI commanding officer.

For more than 50 years, NDRI researchers have worked to conquer oral diseases and injury, and developed techniques and products to improve dental and medical care in the Navy.

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MN020604. Researchers Fight Bioterrorists With Next Generation Vaccine Technology

By Jan Davis, Bureau of Medicine and Surgery

SILVER SPRINGS, Md. - CAPT Daniel J. Carucci, MC, CAPT Al Mateczun, MC,

and CAPT Darrell R. Galloway, MSC, are fighting the war against deadly diseases and bioterrorism in lab coats, their weapons computers, petri dishes and dogged determination.

The medical researchers may be three of America's most mighty warriors against bioterrorists' weapons of mass destruction, deadly diseases such as anthrax, plague and smallpox. For years, they have been fighting the battle almost unnoticed to all but the military, which looks to them to protect American fighting men and women who may be sent in harm's way, to far corners of the world where malaria, dengue fever and scrub typhus can fell service men and women as effectively as a bullet.

Building on the innovative DNA vaccine models developed by Carucci and his fellow Navy researchers, the three captains and their colleagues have quietly worked in laboratories at the Naval Medical Research Center in Silver Spring, Md. to develop the next generation of vaccines against deadly diseases, whether they are naturally occurring or bio-engineered weapons.

Traditional vaccines have saved countless millions, but have their limitations. They take years to develop, and can be difficult and costly to manufacture. They need constant refrigeration, and generally can't be mixed to inoculate against more than one disease at a time. And there's always the danger of side effects.

But now, Carucci, Mateczun, Galloway, and their colleagues may have taken the first steps to a potentially new generation of vaccines, which is expected to be safer, cheaper, stable, have fewer side effects, be more effective against a wider variety of diseases, and easier to administer. They are expected to have what the researchers call "agility" - they can be retailored quickly to become "just-in-time" inoculations against bacteria, viruses or other pathogens that have emerged or re-engineered to make existing vaccines ineffective.

"One of the potential advantages of this agile vaccine technology, which the Navy is a leader in developing, is that production from start to finish might take a matter of months, not years," said RADM Steven Hart, MC, who is head of the Navy's medical research programs.

While traditional vaccines use live virus or killed organisms that stimulate humans and animals to develop an immune response against a specific disease, these agile vaccines will use fragments of organisms' DNA.

Carucci and Galloway are recognized world leaders in development of these DNA vaccines, and they say these vaccines aren't dreams of the future. Today's children may be the first generation to have no fear of some of the world's most deadly scourges.

Mateczun, a prominent expert on biological defense, is one of the unsung heroes in responding to the recent anthrax attacks. He and his team are the inventors of the rapid hand-held assays that were used nation-wide to screen for anthrax. They were the first to identify anthrax contamination at the U.S. Supreme Court, CIA mail room, within the State Department diplomatic mail pouch system, and in one of the Congressional office buildings.

Galloway and Mateczun's most important work now focuses on developing an agile anthrax DNA vaccine. To date, the team has successfully immunized both mice and rabbits against inhalation anthrax using their vaccine, and hopes to be able to begin human trials in 2003.

Carucci and his colleagues' agile DNA vaccine focuses on malaria, historically one of the world's great killers and underminers of readiness in troops deploying to tropical areas. The agile malaria DNA vaccine is now in second stage human trials with promising initial results. Last year, based on research conducted by Carucci and his colleagues, the Navy was issued a U.S. Patent on all DNA vaccines against malaria. *Nature*, one of the most highly respected scientific journals in the world, will dedicate

its March 2002 issue to Navy researchers and others working on the agile malaria DNA vaccine.

Carucci and Mateczun are active duty members of the Navy's Medical Corps. Galloway is a Naval Reservist who recently joined the team full time. When not on active duty, he is a medical researcher in DNA vaccines at The Ohio State University. Together, these researchers will lead a program at NMRC to apply this technology to the war on bioterrorism.

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MN020605. Guantanamo Bay Fleet Hospital Open For Business
BY JOC Bill Austin, Fleet Hospital 20

GUANTANAMO BAY, Cuba - Normally when a new hospital opens for business, it is a grand affair that lends itself to a ribbon cutting ceremony or a speech from a dignitary. Not so for the opening of Fleet Hospital 20. No pomp and circumstance for the Sailors who built it or the Sailors who work there as they opened their doors to their first patient, a detainee.

Just over a week ago, Sailors from Fleet Hospital 20, most of them based out of Naval Hospital Camp Lejeune, N.C., arrived, and with the help of Seabees, cleared land and set up a series of massive tents that serve as a field hospital for wounded detainees held in Camp X-Ray.

"What's exciting is that never in our wildest dreams before Sept. 11 did we think we would have a mission like we have on our hands now," said HMCM Clifford Phillips, the hospital's command master chief. "(It's) something that has never been heard of in Navy Medicine. We're writing new chapters in healthcare delivery every day here."

Outside the hospital in the blazing sun, Sailors of Fleet Hospital 20 were busy fine-tuning their areas of responsibility around the compound.

"We have one heck of a team here," said HMC Les Adams, as he wiped a sweaty brow. "We sure ain't conkin' here," he added, referring to collecting conch shells at the beach, a recreational pastime of local Sailors.

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MN020606. Navy Medicine's DiRosa: A Force for All Sailors
By Bill Doughty, U.S. Naval Hospital Yokosuka

YOKOSUKA, Japan - It's not every day that the Surgeon General calls your ship. So when USS Blue Ridge's (LCC 1) Command Master Chief CMDCM(SW/AW) Jackie DiRosa saw the phone message from VADM Michael L. Cowan, MC, her heart started pounding.

And then she heard the news - she'd been selected to be the new Force Master Chief of Navy Medicine!

"I tell you, it's like a dream come true," she said. "This is monumental."

Becoming Force Master Chief has been DiRosa's goal since she was an E-1, thanks to the mentoring of nurses and senior corpsmen who encouraged her to set goals and work toward getting to the top.

And, as much as she's happy to meet one of her personal goals, DiRosa said she's knows her responsibility is to the junior sailors she hopes to help as Force Master Chief.

"Every day I want the most junior corpsman or dental tech out there to know they have a voice with me. Their opinions are important. Some people think, 'You're just a junior sailor, what do you know?' You'd be surprised; they know a lot more than you think," she said. "If we take time to listen to them we can learn and gain so much information because they're our future. We need to be listening."

According to DiRosa, we also need to create an environment in which sailors want to stay and serve.

"The focus has to be on the junior corpsman, no different from the

focus out here in the Fleet with my most junior sailors. Inspire them, show them what's available, show them what they can do," she said.

To that end, she sees the benefit of temporarily "crossdecking" Fleet and shore corpsmen. While stationed at Naval Medical Center San Diego, she set up an exchange program that allowed corpsmen to work one-on-one with independent duty corpsmen on ships. U.S. Naval Hospital Yokosuka initiated a similar program last year where clinic and ward corpsmen rode USS Blue Ridge.

"These corpsmen came back, fired up about the possibilities of what their future could be. They saw the corpsmen do more than just ward duties," she said.

As Force Master Chief of Navy Medicine and Director of Medical Department Enlisted Personnel, DiRosa will be the most senior hospital corpsman in the Navy and will take on issues affecting the lives of all Sailors and Marines. She plans to visit commands and talk to as many of them as she can.

"Navy Medicine is worldwide," she said. "We take care of sailors worldwide."

DiRosa will relieve FORCM(SW) Mark Weldon, who retires in April 2002.

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MN020607. Portsmouth Offers Tests to Keep Hearts Healthy

By JO2 Jodi M. Durie, Naval Medical Center Portsmouth, Va.

PORTSMOUTH, Va. - This February, as many couples search for that perfect Valentine's Day gift, there is actually something of much greater value they can give their special someone and it's free. So what is this valuable, yet inexpensive gift? It is simple - a healthy heart.

February is American Heart Month, and throughout the month, Naval Medical Center Portsmouth plans to combat heart diseases by targeting staff member's cholesterol levels.

"In February we're providing staff cholesterol testing," said Elaine Nestell, community health programs specialist in the Wellness & Prevention office at Portsmouth. "We're going to focus on the results of high cholesterol, which causes heart attacks, strokes, coronary heart disease and elevated blood pressure."

Should testing reveal high cholesterol, the next step will be to offer assistance in trying to bring levels down to a healthier level. Active duty personnel will automatically be referred to the Family Practice Cholesterol Management program. Civilians will be given handouts on cholesterol. Classes in cholesterol management will be offered as well. A follow-up test will be offered in six months.

Although special emphasis is put on heart health during the month of February, Portsmouth offers programs year-round so working toward living a healthy lifestyle is always an option.

"The key to a healthy heart is eating healthy, exercising and not smoking," said Nestell. "People need to start early by teaching their families the importance of prevention, living a healthy lifestyle and eating right, preventing their children from developing problems later in life."

As the leading killer of Americans, heart diseases claim more than 725,000 lives each year, according to the American Heart Association. To learn more about heart disease prevention, contact your primary care manager or visit the American Heart Association website at www.americanheart.org.

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MN020608. Uniformed Services Pediatric Seminar Is Mar. 10-14

SAN DIEGO - "Charting Our Children's Future: Caring for Children, Their Families and Our Communities," the 36th Annual Uniformed Services Pediatric

Seminar (USPS), will be Mar. 10-14 at The Weston Horton Plaza San Diego, 910 Broadway Circle, San Diego.

Topics have been chosen to provide timely and useful information to uniformed and civilian providers of care to children, and include: at-risk youth, child advocacy, community pediatrics, dermatology, immunization update, obesity epidemics, public health topics, and response to terrorism.

A complete list of topics, presentations and workshops, along with a registration form is under "Subspecialty/Section Courses" at www.aap.org/profed/cmecourses.htm. Continuing medical education credits are offered.

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